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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Re: U.S. Patent Application No. filed 09/17/04
Applicant: Norris, Elwood G. et al.
Title: **PARAMETRIC RING EMITTER**
Group Art Unit:
Attorney Docket No. T5276.CIP2.PCT.US

Sir/Madam:

Transmitted herewith for filing and pursuant to 37 C.F.R. §§ 1.56 and 1.97 is an Information Disclosure Statement. Enclosed also are the following designated documents, as required under 37 C.F.R. §§ 1.97 and 1.98:

- ☒ Form PTO-1449 list of 36 references submitted for consideration.
- ☐ Legible copies of the listed references or their relevant portions.
- ☒ Legible copies of the listed non-patent documents and foreign documents or their relevant portions are included.
- ☒ Copies of U.S. patents and/or publications are not included pursuant to the Official Gazette Notice, dated Aug. 5, 2003, waiving the requirement of 37 C.F.R. 1.98(a)(2)(i).
- ☐ All English translations of each non-English reference, if any, within the possession, custody, control or availability of anyone designated in 37 C.F.R. § 1.56(c) (see 37 C.F.R. § 1.98(c)).

04/21/2005 CSM00T 00000006 200100 10529013
Sale Ref: 00000006 DAH: 200100 10529013
02 FC:8021 10.00 DA 30.00 OP

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The following are included within the Information Disclosure Statement if applicable and as required under 37 C.F.R. § 1.98:

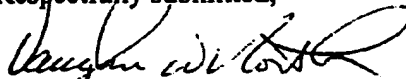
- ☐ Concise explanation of relevance of each reference not in English and unaccompanied by an English translation.
- ☐ Statement that certain listed references not enclosed are substantially cumulative of an enclosed reference.
- ☐ Statement that certain listed references not enclosed were previously cited by or submitted to the Office in prior application no. _____, filed on _____, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

In order to secure consideration of the items designated above, one or more of the following, if required, is also enclosed:

- ☐ Statement under 37 C.F.R. § 1.97(e)(1) or (2).
- ☐ Check No. _____, which includes the amount of \$180.00 (amount in § 1.17(p)) constituting the submission fee set forth in 37 C.F.R. § 1.17(p).

In the event that 37 C.F.R. § 1.97(c) applies and the Examiner is not satisfied that the Statement meets the requirements of 37 C.F.R. § 1.97(e), or in any other event remediable by a fee, please credit any over payment or charge any additional fees to Deposit Account No. 20-0100 of the undersigned.

Respectfully submitted,



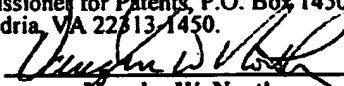
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VWN/skp

IN THE UNITED STATES PATENT & TRADEMARKS OFFICE

ART UNIT:
EXAMINER:
APPLICANT: Norris, Elwood G. et al.
SERIAL NO.:
FILED: 9/17/2004
CONFRM. NO.:
FOR: PARAMETRIC RING EMITTER

<p align="center">CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.10</p> <p>DATE OF DEPOSIT: <u>Dec 6, 04</u></p> <p>I hereby certify that this paper or fee (along with any paper or fee referred to as being attached or enclosed) is being deposited with the United States Postal Service with sufficient postage on the date indicated above and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.</p> <p align="right"> Vaughn W. North</p>
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INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir/Madam:

Please find, pursuant to 37 C.F.R. § 1.98(a)(1), the enclosed Form PTO-1449 which contains a list of all patents, publications, or other items that have come to the attention of one or more of the individuals designated in 37 C.F.R. § 1.56(c). Applicant respectfully submits that this Information Disclosure Statement is filed pursuant to:

☒ 37 C.F.R. § 1.97 (b)(1) or (3), within three months of the filing date of the application, or before a first office action on the merits, whichever occurs last;

☐ 37 C.F.R. § 1.97 (c), after a first office action on the merits, but before a Final Office Action or a Notice of Allowance, whichever occurs first, and is accompanied by either 1) a statement in accordance with 37 C.F.R. § 1.97(e), or 2) the fee set forth in § 1.17(p); or

☐ 37 C.F.R. § 1.97 (d), after a Final Office Action or Notice of Allowance, whichever occurs first, but on or before payment of the issue fee, and is accompanied by both 1) a statement in accordance with 37 C.F.R. § 1.97(e), and 2) the fee set forth in § 1.17(p).

While no representation is made that any of these references may be "prior art" within the meaning of that term in accordance with 35 U.S.C. §§ 102 or 103, the enclosed list of references is disclosed so as to comply with the duty of disclosure set forth in 37 C.F.R. § 1.56.

Moreover, while no representation is made that a specific search of office files or patent office records has been conducted or that no better art exists, the undersigned attorney of record believes that the references listed, together with any other references which may have been previously submitted or listed, are the closest to the claimed invention (taken in its entirety) of which the undersigned is presently aware, and no art which is closer to the claimed invention (taken in its entirety) has been knowingly withheld.

☐ A legible copy of each listed U.S. Patent or publication (or relevant portion thereof) which was not previously submitted to, or cited by, the Patent Office is enclosed pursuant to 37 C.F.R. §§ 1.97 and 1.98.

☒ A legible copy of each of the listed non-patent literature and foreign documents or their relevant portions is enclosed.

☒ Copies of cited U.S. patents and/or publications are NOT enclosed pursuant to the Official Gazette Notice, dated Aug. 5, 2003, waiving the requirement of 37 C.F.R. § 1.98(a)(2)(i).

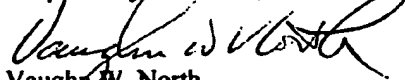
☐ Copies of the references listed in the accompanying Form PTO-1449 are NOT enclosed because, under 37 C.F.R. § 1.98(d), they were previously cited by or submitted to the Office in application number _____, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

For all listed references that are not either in the English language, or accompanied by a translation into English, a concise explanation of relevance as required under 37 C.F.R. § 1.98(a)(3) is enclosed attached to each.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or to credit any overpayment to Deposit Account No. 20-0100.

Dated this 6 day of December, 2004.

Respectfully submitted,



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VWN/skp
Enclosure

PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
T5276.CIP2.PCT.US

SERIAL NO.

LIST OF PRIOR ART CITED BY APPLICANT

APPLICANT Elwood G. Norris et al.

FILING DATE
09/17/04

GROUP

U.S. PATENT DOCUMENTS

EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	1,616,639	Feb. 8, 1927	Sprague			
	AB	1,951,669	March 20, 1934	Ramsey			
	AC	2,461,344	Feb. 8, 1949	Olson			
	AD	3,012,222	Dec. 5, 1961	Hagemann			
	AE	3,398,810	Aug. 27, 1968	Clark III			
	AF	3,461,421	Aug. 12, 1969	Stover			
	AG	3,612,211	Oct. 12, 1971	Clark III			
	AH	3,613,069	Oct. 12, 1971	Cary, Jr. et al.			
	AI	3,710,332	Jan. 9, 1973	Tischner et al.			
	AJ	3,723,957	Mar. 27, 1973	Damon			
	AK	3,742,433	June 26, 1973	Kay et al.			
	AL	3,836,951	Sept. 17, 1974	Geren et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AM	60150399 A	Aug. 8, 1985	Japan			Yes
	AN	H2-265400	Oct. 30, 1990	Japan			Yes
	AO	WO99/35881	July 15, 1999	Japan			Yes
	AP						
	AQ						

OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)

	AR		THE AUDIO SPOTLIGHT: AN APPLICATION OF NONLINEAR INTERACTION OF SOUND WAVES TO A NEW TYPE OF LOUDSPEAKER DESIGN, Yoneyama, et al. J. Acoustical Society of America 73(5), May 1983, Pages 1532-1536				
	AS		PARAMETRIC LOUDSPEAKER - CHARACTERISTICS OF ACOUSTIC FIELD AND SUITABLE MODULATION OF CARRIER ULTRASOUND, Kenichi Aoki, Tomoo Kamakura, Yoshiro Kumamoto, Electronics and Communications in Japan, Part 3, Vol. 74, No. 9, 1991, Pages 76-82				
	AT		ULTRASONIC RANGING SYSTEM by Polaroid				

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
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LIST OF PRIOR ART CITED BY APPLICANT

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FILING DATE
09/17/04GROUP
2644

U.S. PATENT DOCUMENTS

EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	4,005,278	Jan. 25, 1977	Görke			
	AB	4,207,571	Jun. 10, 1980	Passcy			
	AC	4,245,136	Jan. 13, 1981	Krauel, Jr.			
	AD	4,378,596	Mar. 29, 1983	Clark			
	AE	4,418,248	Nov. 29, 1983	Mathis			
	AF	4,429,194	Jan. 31, 1984	Kamon et al.			
	AG	4,433,750	Feb. 28, 1984	Neese			
	AH	4,593,160	Jun. 3, 1986	Nakamura			
	AI	4,823,908	Apr. 25, 1989	Tanaka et al.			
	AJ	4,908,805	Mar. 13, 1990	Sprenkels et al.			
	AK	4,991,148	Feb. 5, 1991	Gilchrist			
	AL	5,181,301	Jan. 26, 1993	Wheeler			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AM						
	AN						
	AO						
	AP						
	AQ						

OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)

	AR		EXCERPTS FROM ON COMBINATION TONES, Helmholtz, Editor's Comments on Paper 16, Pages 228-238
	AS		PARAMETRIC ACOUSTIC NONDIRECTIONAL RADIATOR, Makarov, et al., Acustica, Vol. 77 (1992), Pages 240-242
	AT		PARAMETRIC ACOUSTIC ARRAY, Westervelt, P.J., The Journal of the Acoustical Society of America, Vol. 35, No. 4, Pages 535-537

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U.S. PATENT DOCUMENTS

EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5,317,543	May 31, 1994	Grosch			
	AB	5,357,578	Oct. 18, 1994	Taniishi			
	AC	5,844,998	Dec. 1, 1998	Nagano			
	AD	6,359,990	Mar. 19, 2002	Norris			
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AM						
	AN						
	AO						
	AP						
	AQ						

OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)

	AR		ARRAYS OF PARAMETRIC RECEIVING ARRAYS, H. O. Berkay and T.G. Muir, Applied Research Laboratories, The University of Texas at Austin, Austin, Texas, November 9, 1972, The Journal of the Acoustical Society of America pp. 1377-1383
	AS		
	AT		

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